Flying Machine Sustains Itself

Experiment at Kitty Hawk Pronounced a Success. Good Speed in the Teeth of a Moderate Gale Up the Coast

Norfolk, Va., Dec. 18.—A successful trial of a flying machine was made yesterday near Kitty Hawk, N. C., by Wilbur and Orville Wright of Dayton, O. The machine flew three miles in the face of a wind blowing at a registered velocity of twenty-one miles an hour, then gracefully descended to the earth at the spot selected by the man in the navigator's car as a suitable landing place. The machine has no balloon attachment, but gets its force from propellers worked by a small engine. During the trial Wilbur Wright occupied the operator's seat and steered the apparatus.

For three years the Wrights have experimented at Kitty Hawk with their invention. They chose that point because of its isolation and the absence of publicity. By the merest chance the success became known, as neither of the men is ready to make public the details of their machine.

The flight began from a platform constructed on a high sand hill near Kitty Hawk. There was no starting apparatus used to give momentum to the huge bird-like affair. When all was ready Wilbur Wright took his place in the car in the centre of the machine and his brother released the catch which held the affair to the top of the incline.

Gravity did the rest, and while a rush down the slope was going on the navigator started a small gasoline engine in the floor of the car. By a system of pulleys and cogs this engine put in motion a six-bladed propeller directly beneath it and another extended horizontally to the rear. The first is used to maintain the elevation and the other to propel the machine.

Instead of losing elevation when the end of the platform was reached the machine continued its flight undisturbed, and as the under propeller increased its revolutions the machine gradually pointed upward and soon had attained a height of sixty feet above the rolling sand dunes.

A stiff wind was blowing up the coast and the start was made directly in the teeth of it, but the machine rushed through it without difficulty and maintained an even speed of eight miles an hour with ease. The small crowd of fisher folk and coast guards who have been curiously watching the construction of the machine for months, followed beneath it, with exclamations of wonder; but it soon drew away from them and went on its flight through the air alone. The first mile was covered, and then Orville Wright declared the invention was a success.

The Wrights have used the box-kite idea in their invention, and their flying machine is really an immense kite, with propellers and steering attachment. Its frame is of wood, stretched with canvas, and its dimensions, as accurately as can be secured, are here given: Width 33 feet from tip to tip; depth from front to rear, 5 feet; height, also 5 feet. In the centre of this frame is constructed the navigator's car, while the engine below it serves as ballast. Directly beneath the car, and arranged to push upward, is the immense propeller used for elevating the machine, and extending horizontally to the rear is the propeller that gives the forward motion. A rudder spread with canvas, extended 15 feet forward, and, spread like a fish tail, kept the machine straight to the wind. The total area of the machine surfaces is exactly 306 square feet.